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Windows Vista beats hackers, says Microsoft

Windows Vista has beaten the competition in repelling hackers, according to Microsoft. The company claimed it was the most secure operating system available during the 90 days after its release and suffered from fewer security holes than other operating systems.

Jeff Jones, security strategy director of Microsoft's Trustworthy Computing division, said that only one vulnerability was uncovered in Vista in the first 90 days following its November launch, compared to 14 in Windows XP, 20 in Mac OS X 10.4, 71 in Ubuntu 6.06 Linux, 80 in Novell's SUSE Linux Desktop 10 and 137 in Red Hat's Enterprise Linux 4 WS.

"Vista has an improved security vulnerability profile over its predecessor and a significantly better profile relative to comparable modern competitive operating systems. As an early and tentative indicator, this is good news for Windows Vista security," said Jones.

However, not everyone was so upbeat about Vista. Oliver Friedrichs, senior director of Symantec's security response team, warned that the types of vulnerability

can be more important than their quantity. "A single vulnerability that has a high severity could lead to the next Sasser or Blaster worm, so an [operating system] with a larger bug count may be in a better defensive position overall," he said.

Friedrichs also questioned whether 90 days was long enough to draw any conclusions given that, for most of the period, Vista was available only to large companies, which are always slow to install new operating systems. "The installed base of Vista has not grown as quickly as XP's in its first 90 days," he warned.

"With the security improvements Microsoft has made, we would expect that the [operating system] is more secure. But is that meaningful in the long term?"

"Hackers are moving away from attacking the core [operating system] and are focusing on third-party applications and drivers... Though it may be likely that Microsoft will be less to blame for attacks because it's invested in Vista's security, the overall volume of attacks or exploits will not diminish," said Friedrichs.

Linux gets the Conservative vote

Open-source software has gained a new champion in Tory shadow chancellor George Osborne, who claimed that adopting it in the public sector could save taxpayers over £600 million.

"There isn't a level playing field for open-source software. As it stands, too many companies are frozen out of government IT contracts, stifling competition and driving up costs," said Osborne in a speech to the Royal Society of Arts.

"All too often, a government IT system is incompatible with other types of software, which stifles competition and hampers innovation. Looking at the litany of IT projects that have collapsed or spiralled over budget, it's clear too that this has meant billions of pounds wasted," he said.

Osborne's remarks were aimed at the government's mixed record with IT. The National Plan, designed to create a single nationwide database of 50 million patients' NHS records, is expected to cost more than £30 billion, five times the original estimate.

Osborne cited examples in Japan and Spain, where government bodies have made considerable savings by installing open-source products. "Here in the UK, some public bodies have already shown what can be achieved," he added. "A recent Department for Education and Skills report found that, on average, primary

schools using open-source software cut their IT costs per PC by 50 per cent."

Labour has been accused of being too close to Microsoft in the past, with Prime Minister Tony Blair inviting Bill Gates to Downing Street in 2001 to discuss the NHS IT programme.

Osborne, however, appears to regard open-source software as a philosophical inspiration.

"Open-source politics means rejecting the old monolithic top-down approach to decision-making. It means throwing open the doors and listening to new ideas and new contributors," he said.



▲ George Osborne: open-source fan

Wikipedia calls on the search

Wikipedia founder James Wales is planning a move into online search. Speaking at a press conference in Tokyo, Wales claimed that the collaborative model that has made Wikipedia one of the world's most-visited sites can challenge web giants Yahoo! and Google.

"The idea that Google has some edge because [it has] super-duper rocket scientists may be a little antiquated now," said Wales, who claimed that Wikia, his commercial spin-off from

Wikipedia, could grab up to five per cent of the search market.

Wales said that Google and Yahoo! are like "black boxes" because they hide the way they generate results to search enquiries. In his alternative approach, Wales plans to distribute Wikia-created tools to anyone who wants to create searchable content on any subject. In return, they have to link to the advertising-funded Wikia.com site.

Meanwhile, Wikipedia faces new competition on its own turf.

Right-wing US pressure group the Eagle Forum has launched its own online database, Conservapedia. The Eagle Forum alleges that, far from being an impartial reference, Wikipedia has a "liberal bias".

"Wikipedia... is increasingly anti-Christian and anti-American," wrote the Conservapedia authors. They object that "edits to include facts against the theory of evolution are almost immediately censored [in Wikipedia], even though most Americans reject the theory of evolution".

Wireless insecurities found at leading security conference

A recent experiment by AirDefense, a US company specialising in wireless security, has revealed how vulnerable people and companies are to data theft when using WiFi networks.

The company sent a team equipped with wireless equipment to park outside the RSA Conference 2007, held earlier this year in San Francisco. The RSA Conference billed itself as “the world’s leading information security conference and expo”, attended by “the world’s largest community of information security professionals”. Incredibly, the AirDefense team was able to listen in on over half the wireless traffic emanating from a prestigious security conference.

While the US government cyber security chief Gregory Garcia used his keynote speech to congratulate delegates on “the culture of security all of you have perpetuated year after year,” AirDefense operatives were successfully probing the conference using “wireless airwave monitoring”.

The company estimated that around 56 per cent of the 623 WiFi-enabled devices it detected in use at the event were vulnerable to attacks. These included laptops, PDAs and mobile phones. “When it comes to wireless security, there is a profound amount of user indifference. You don’t really see what you are getting yourself into,” said AirDefense’s chief technology officer Amit Sinha.

“With wireless networks, your data is being transmitted over the open air,” warned Stuart Elefant, senior product manager at market-leading security vendor McAfee. “Anyone can grab those data packets, and they can jump on your home wireless network to do bad things to you and to other people. It’s as if they came in your front door and plugged into your network.”

Hackers at the Defcon hacker convention recently demonstrated that wireless networks can be monitored from as far away as 100 miles with specialised antennas.

Adobe launches web apps for all

Adobe has launched an early preview version of new software that allows users to run web-based programs on any computer, with any operating system. While web-based applications such as Google Docs are nothing new, Adobe Apollo works even without an internet connection.

In the past, companies including Netscape and Sun have attempted to market similar projects, only to be beaten back by Microsoft. Netscape Navigator and Sun Java Virtual Machine were intended to create an environment for running software that was not tied to any specific operating system. Microsoft used illegal anti-competitive tactics to fend off this threat to its monopoly.

Microsoft’s new focus on online services has led it to develop something similar to Apollo. Its Windows Presentation Foundation (WPF) is also designed to run powerful web-based applications, but it works only with Windows. In contrast, Apollo is designed to work on top of Linux and Mac OS X as well as Windows.

“One of the biggest issues with web-based apps is they just don’t work at all in a disconnected state. By creating an environment that allows those apps to function offline and seamlessly reconnect, Adobe hopes to bridge the gap between the online and offline worlds,” said Jupiter Research analyst Michael Gartenberg.



▲ Adobe Apollo will work with Linux and Mac OS as well as Windows-based PCs

EXCLUSIVE

Backup software deletes backups

A backup program for Windows has been found to delete users’ files instead of saving them.

Computer Shopper has discovered a bug in Roxio Backup MyPC 2006 that causes it to overwrite backup files, destroying data that had previously been saved. It fails to provide any warning that there is a problem and users are likely to discover that their data has gone only when they come to restore it – by which time it will be too late.

The problem occurs when creating incremental backups automatically. This should create a series of files each time the backup runs, with each backup file containing copies of only those files that have changed or been created since the previous backup. Running an incremental backup manually in Backup MyPC prompts the user for a new filename when creating each file. However, using the scheduler does not prompt for a new filename, and the software overwrites the backup file instead. This deletes all the files saved by the previous backups.

When *Shopper* first told Roxio about this problem we were advised to run incremental backups using optical media, such as with writable CDs or DVDs. This would prevent backups being overwritten, but would not solve the problem awaiting current customers who have been saving files to a hard disk.

We asked Roxio if it intended to fix this serious problem, noting that the ‘incremental backup to hard disk’ option remains available even though the company acknowledges that it does not work. A spokesperson assured us the next version will work properly. After pressure from *Shopper*, Roxio is now “planning to fix the bug” for current users by issuing an update that will prevent them creating backups that provide a false sense of security.

● See *Software Labs*, page 121.

IN BRIEF

» HACKERS STEAL CREDIT CARD DETAILS

Fashion retailer TK Maxx has revealed that hackers have stolen credit card information for 45.6 million of its customers in the UK, US and Canada. The company said the hacker had accessed its data centres in Watford and Massachusetts and stole details of transactions from a four-year period up to December 2006.

Customers’ names, card numbers and personal data were stolen and used for fraudulent transactions in the US, where six people have been charged.

Two-thirds of the cards had expired by the time of the security breach and a further 3.8 million had encrypted data. However, the information from the remaining 11.2 million was readily accessible.

» IPOD EJECTING FIX FOR VISTA

Microsoft has released a patch for Windows Vista that fixes a problem that occurs when ejecting an iPod.

Previously, disconnecting the music player using Vista’s Safely Remove Hardware procedure could cause data on the device to be corrupted. The problem could also occur when dismantling it using Windows Explorer.

The patch is available for both x86 and 64-bit versions of Vista from <http://support.microsoft.com/kb/933824/en-us>.

» YAHOO! OFFERS UNLIMITED STORAGE

Yahoo! says it will offer unlimited email storage in May. The world’s biggest email service, with 250 million users, is scrapping its free email storage limit of 1GB because increasing numbers of people are sending email messages with large attached files such as photos, music and videos.

Microsoft imposes a 2GB storage limit on users of its free email service, while Google Mail allocates 2.8GB by default.

» ONLINE PROFILES DAMAGE CAREERS

Whether they include drunken party photos posted on Flickr or expletive-filled MySpace pages, your previous online postings may come back to haunt you and your career, a YouGov survey has found.

A fifth of employers have looked up prospective recruits online, with over half of them saying it affected their decision to hire the person.

IN BRIEF

» MOBILE PHONES TO BECOME SMARTER

Mainstream mobile phones may soon get smarter and include powerful smartphone features. Symbian has announced a new version of its mobile phone OS that has been designed to run fast on slow hardware.

Although Symbian is found on 70 per cent of smartphones, its low hardware requirements and powerful features could make it a good choice for more basic phones. It uses 25 per cent less RAM than previous versions, automatically defrags files, loads programs up to 75 per cent faster and has an improved battery life.

The platform also supports standards for television (DVB-H, ISDB-T) and location-based services, while the introduction of a SQL database offers a familiar interface for data access and storage. Symbian has also introduced 35 new features for cameras, including support for tilt sensors, preset image enhancements, panorama stitching and red-eye reduction.

» NIKE INCLUDES IPOD FEATURES IN ALL RUNNING SHOES

Nike has announced it will make all its running shoes compatible with the Nike+Apple wireless transmitter system.

The Nike+Apple system pairs an iPod Nano, transmitter and receiver with Nike footwear, to swap training information between the music player and the shoes themselves. Performance data is recorded on the iPod and uploaded to the web the next time the iPod is synchronised through iTunes.

» WINDOWS VISTA SALES BETTER THAN EXPECTED

Microsoft claims to have sold more than 20 million Windows Vista licences in the first month since it made the operating system available to consumers on 30th January 2007.

It said twice as many Windows Vista licences were sold compared to its predecessor. It sold 17 million licences for Windows XP during its first two months. The most popular versions of Windows Vista have been Home Premium and more expensive editions, possibly because computer magazines such as *Shopper* believe the more limited versions are not worth bothering with.

Microsoft backs JPEG alternative

Microsoft has announced a new digital image format intended to succeed the JPEG and RAW formats used by digital photographers.

It launched its HD Photo file format at the Photo Marketing Association (PMA) show as a "new format for end-to-end digital photography that offers higher image quality, greater preservation of data and advanced features for digital-imaging applications". Despite its name, HD Photo has no connection to the HD TV video format or the HD DVD optical disc.

Microsoft claimed that HD Photo compresses images with "up to twice the efficiency of JPEG, with fewer damaging artefacts, resulting in higher-quality images that are one half the image size". It also claimed HD Photo requires less processing overhead to decompress files.

"With HD Photo, we're taking a new approach to creating and editing photos that simply isn't available to photographers with today's formats," said Amir Majidimehr, corporate vice-president of the Consumer Media Technology Group at Microsoft. "HD Photo fully preserves the original image fidelity with high dynamic range while still allowing for significant improvement in compression size."



▲ Microsoft's new format will allow super-sharp digital photos

Microsoft said HD Photo, which supports lossless and lossy compression, is compatible with Photoshop thanks to plug-ins the company has codeveloped with Adobe. The plug-ins, which will work with CS2 and the forthcoming CS3 suite, will be available for both the Windows and Mac OS X versions of Adobe's software. Beta versions are ready now, and the finished plug-ins will be available in May free of charge, the company said.

Microsoft hopes to encourage other hardware and software companies to adopt its new image format by making the HD Photo Device Porting Kit available free of charge. HD Photo (HDP) is a successor to Microsoft's Windows Media Photo (WMP). The change of name could be a sign of the company's determination to make its format a universal, platform-independent successor to the JPEG standard.

JPEG's limitations have prompted many photographers and publishers to use uncompressed images in the RAW digital camera format. Adobe has already tried to establish a single RAW format to replace the variations used by camera manufacturers. Microsoft said it intends to submit HD Photo to imaging standards bodies.

Dell customers want Linux

Dell's IdeaStorm – an online suggestion box for its customers, designed to inform the company of what people want – revealed a large demand for open-source software.

The IdeaStorm website (www.ideastorm.com) ranks customer suggestions and shows the number of people posting requests for each option. Top of the list, with just over 115,000 requests at the time of writing, is a request that Dell ship PCs with the "three top free Linux versions" preinstalled. "Offer easy multi-boot options with Windows Vista, Windows XP or NO Windows (yes, Linux can entirely replace Windows)" read the most popular suggestion.

The most popular posted suggestion also contained a damning indictment of the junk software that comes pre-loaded with so many Windows PCs. "Choice is what consumers want on their new PCs, not annoying surprise circus-ware (the typical smattering of confusing third-party pop-up-infested software found on most new Dell PCs). Quality free and open-source software is well behaved, and may be legally preinstalled on PCs, and legally shared with friends and family; sharing is encouraged!"

Coming second and third, with over 80,000 and 55,000 votes respectively, were requests for preinstalled copies of OpenOffice.org rather than Microsoft Office or Works and Firefox instead of Internet Explorer. The top nine suggestions were all requests for preinstalled open-source software, usually at the expense of Microsoft software.

Dell issued a statement acknowledging that a vocal and seemingly significant section of its customer base wants it to embrace open-source software, but it was cautious about committing to the idea: "The IdeaStorm community suggested more than half a dozen [Linux] distributions. We don't want to pick one distribution and alienate users with a preference for another. We are continuing to investigate... other Linux-related ideas."

BBC closes Jam

The BBC has abruptly closed BBC Jam, its flagship online education service, after complaints that it unfairly damaged competing services from commercial providers.

BBC Jam was launched as an online learning resource for schoolchildren in January 2006 with a £150 million budget, after government approval in 2003. Half the budget has already been spent. The BBC Trust, which earlier this year replaced the BBC board of governors as overseers of the corporation, said the BBC has several months to propose the resumption of an amended service.

Acting BBC Trust chairman Chitra Bharucha said: "The Trust has requested BBC management to prepare fresh proposals for how the BBC should deliver the Charter obligation to promote formal education and learning, meeting the online needs to school-age children. Despite a rigorous approval process involving the BBC Governors, the Department for Culture, Media and Sport, and the European Commission resulting in extensive conditions on the service, BBC Jam has continued to attract complaints from the commercial sector about the parameters of its activities."

The complaints were led by the British Educational Suppliers Association (BESA), which claimed that the service was unfairly harming its business. The 170,000 pupils and teachers who had registered to use the service have lost any work stored on the BBC Jam servers. The Conservative Party spokesman on broadcasting, Ed Vaizey, said: "This is a mess of the government's own making. They told the BBC to set up Jam, even though a number of education companies were providing those services. We have constantly raised concerns about BBC Jam and its impact on the private sector."

Microsoft throws book at Google

Google's project to scan the world's books is illegal because the company "systematically violates copyright", according to Microsoft's associate general counsel, Thomas Rubin.

"Companies that create no content of their own and make money solely on the backs of other people's content are raking in billions through advertising revenue," said Rubin in a speech to the Association of American Publishers (AAP). Microsoft has its own library-scanning project but, unlike Google, it does not scan books that are still protected by copyright. Rubin's speech was particularly inflammatory, as the AAP has already taken legal action to try to prevent Google scanning copyrighted books.

"Google takes the position that everything may be freely copied unless the copyright owner notifies Google and tells it to stop," Rubin

said. Google said its book-scanning project would not make digital copies of entire works freely available, but would instead make small passages readable through a search tool to help researchers and prospective purchasers find what they're looking for.

"Google Book Search and YouTube is to help users find information from content producers of every size," said David Drummond, senior vice-president of corporate development at Google. "We do this by complying with international copyright laws. The result has been more exposure and, in many cases, more revenue for authors and producers of content."

"Google is saying to copyright owners: 'Trust us, you're protected. We'll keep the digital copies secure, we'll only show snippets; we won't harm you, we'll promote you,'" said Rubin. But, he claimed, Google

shows contempt towards intellectual property in general. "Google's track record of protecting copyrights in other parts of its business is weak at best. Anyone who visits YouTube, which Google bought last year, will [see] that it follows a similarly cavalier approach to copyright," he said.

Not everyone at Microsoft agreed with Rubin's aggressive stance. "What are these Microsoft lawyers thinking? Even if they are right, which is debatable, what reaction do they expect from the public at large?" wrote Don Dodge, director of business development for Microsoft's Emerging Business Team, on his blog.

"Google only exposes 'snippets' or short excerpts of books under copyright. Google believes, and many legal experts agree, that excerpts are considered 'fair use' under copyright law," he wrote.

EU bites back at Apple • BBC backs YouTube

The European Union has signalled that it intends to get tough with Apple and force it to make iTunes downloads work with music players other than its own iPods.

Recently appointed EU commissioner for consumer protection Meglena Kuneva told German magazine *Focus* that Apple was treating EU consumers unfairly by denying them the ability to play music they'd paid for on the player of their choice. "Do you think it is normal that a CD can be played regardless of which CD player you use, but that a song bought on iTunes can only be downloaded on to an iPod?" she said. "I don't. Something has to change."

While the EU Consumer Protection Commission said Kuneva's statement did not reflect any official decision to go after Apple, Kuneva is chairing a review of EU-wide consumer rights, the conclusion of which could find its way into European law. Apple said it had not yet been contacted by anyone in Kuneva's office.

Apple has already faced a series of challenges to its proprietary hold on the FairPlay DRM that adds a layer of copyright protection to song downloads and also locks out competitors. In 2006, French lawmakers passed legislation designed to force all online music retailers to make their downloads multiplatform, although the law was weakened with loopholes and ultimately let Apple off the hook.

Apple currently faces an October deadline, by which time it has to open up iTunes or close down its operations in Norway. Law-makers and consumer bodies in other Scandinavian countries, France, Germany and Holland have expressed their support for Norway's stance.

In the past, Apple CEO Steve Jobs indicated that Apple might prefer to leave a country rather than license FairPlay. "Norway, France and other countries might not like it, but it's very doubtful Apple would change its business model in Europe to meet their requirements," said David Radack, an intellectual-property specialist for US law firm Eckert Seamans.

However, the prospect of having to withdraw from the whole of the EU could yet prompt a change of policy. Jobs recently wrote an open letter saying Apple would be prepared to scrap DRM if the record industry would let it. But, he claimed, while music companies insist on DRM, Apple could ensure only that FairPlay was not hacked by keeping it tightly controlled and not sharing it with others.

The BBC has created three channels on YouTube, showing promotional clips for shows, news bulletins and archive video of classic shows. The BBC's decision was in marked contrast to US broadcast giant Viacom, which has just filed a \$1 billion (around £509m) lawsuit against YouTube and its parent Google for "massive intentional copyright infringement".

Viacom requested that the US courts grant it an injunction to stop the clips being featured on YouTube. Viacom's suit was couched in near-apocalyptic terms. "YouTube appropriates the value of creative content on a massive scale for YouTube's benefit without payment or licence. [Its] brazen disregard of the intellectual-property laws fundamentally threatens not just plaintiffs but the economic underpinnings of one of the most important sectors of the United States economy."

YouTube also announced that it has signed deals with over 1,000 smaller media companies, allowing their content to be shown on the site. The company said it planned to share revenues generated from advertising on the site with its new partners, and that ultimately people who post their own videos on YouTube will be able to make money if they are popular enough.

Former BBC employee Ben Metcalfe, who worked there for six years developing the BBC News website, was not impressed. "The BBC should have taken notice that most of the other big broadcasters have turned their nose up at this and previous YouTube deals. Most bluechip broadcasters have avoided putting their clips up on YouTube as even a non-exclusive licence dilutes their own efforts to market and display such clips on their own sites," he wrote in his blog.



▲ Download the latest BBC clips from YouTube

IN BRIEF

PHONE HOME FROM THE LONDON UNDERGROUND

Transport for London plans to test the commercial and technical viability of providing mobile phone coverage on the below-ground sections of the London Underground train network.

If a new trial goes as planned, being stuck on the tube will no longer be an excuse for not calling. London Underground has announced plans to trial mobile phone coverage for six months, starting in April 2008. It will test the extension of coverage on the Waterloo and City platforms at Bank and Waterloo stations, as well as in the tunnels between the stations.

POLICE FOIL A PLOT TO BLOW UP UK INTERNET

Police have uncovered a plot to blow up the UK's internet hub, according to reports from *The Sunday Times*.

If successful, it is believed the suspected al-Qaida plot could have knocked out most of Britain's internet services.

The newspaper reported that the Metropolitan Police discovered computer files indicating that terrorist suspects had been planning to infiltrate Telehouse in London's Docklands, with the aim of blowing it up from the inside.

Most of the internet traffic for the UK passes through the Docklands facility. Police found the files after raids on a house in the south of England.

GOOGLE FADES IN NEW GOOGLE DESKTOP

Google has updated its Desktop application, which displays gadgets in a sidebar and optionally applies Google search to the contents of your own computer.

In the Google company's blog, product marketing manager Mendel Chuang announced that the Google Desktop 5 beta is now available. "The most prominent changes you'll notice are to our gadgets and sidebar," says Chuang. "Some of the gadgets have been redesigned to provide you with the same useful information but in a more easy-to-read and visually appealing format."

"The sidebar has also been changed to blend in even more with your desktop."

IN BRIEF

» SWEET BATTERY SOLUTION

Researchers have developed a battery cell that can run on sugar, is biodegradable and lasts up to four times longer on a single charge than a conventional lithium-ion cell.

"This study shows that renewable fuels can be directly employed in batteries at room temperature to lead to more energy-efficient battery technology than metal-based approaches," said study leader Shelley Minteer.

The battery cell contains enzymes that convert sugars into electricity, leaving behind a harmless by-product of water. Successful tests were carried out using a range of fuel sources including glucose, flat fizzy drinks, sweetened drink mixes and tree and cacti sap. Carbonated drinks appeared to be too inefficient. Table sugar itself was found to be the best fuel source, although the new fuel cell can operate using almost any sugar source.

» EXPERTS DEMAND RESEARCH INTO NANO RISKS

There should be more research into the potentially damaging effects of nanotechnology, according to the Council for Science and Technology. The government's top-level advisory board claimed that we know too little about any health and environmental hazards and that public confidence should be maintained in the industry.

Nanotechnology, which involves manipulating materials on an ultra-small scale, has the potential to make better products in fields from computing to cosmetics to fuel additives. However, nanoparticles tens of thousands of times smaller than the width of a human hair could be dangerous if they interact with the human body or the environment in unexpected ways.

» ANTI-TERRORIST ROBO HORNET

Israel is developing a flying anti-terrorist robot the size of a hornet. The bionic, nanotechnology-based device is a so-called Micro Air Vehicle (MAV) designed to spy on subjects and possibly even kill them. It is believed that British Special Forces are already modifying a 6in MAV by adding a C4 explosive payload to use against snipers.

Animals to tackle web crawling

If you can tell the difference between a cat and a dog, you're one step ahead of a web crawler, and it is this human cognitive ability that is behind Microsoft's Asirra project.

To prevent web crawlers gathering emails for spamming and automated attacks on password-protected websites, many web masters use a 'human recognition system' known as Captcha. Captcha stands for Completely Automated Public Turing test to tell Computers and Humans Apart.

Captcha systems display distorted combinations of letters and numbers, which have to be recognised and then typed into a box if you want to enter the site. The letters can be so distorted that humans find it hard to read them, let alone a malware program. You'll have experienced Captchas when signing up for services such as the Windows Live account or Google Mail.

Microsoft researchers have come up with an innovative alternative: Animal Species Image Recognition for Restricting Access, or Asirra. This exploits the fact that people find it easy to distinguish between animal species, while computers do not.

Microsoft is providing Asirra (see <http://research.microsoft.com/asirra> for details), currently in beta, as a free-of-charge service. Even better, the images it uses are from the Petfinder.com database of homeless pets. At the bottom of each image is an Adopt Me! link if you see a particularly adorable animal.



Robot spy gets human face

Headthere, a Californian robotics company, has announced one of the creepiest products yet: the Giraffe 'videoconferencing robot'.

When you can't make it into the office, you simply log on to an available giraffe – which looks a little like an upright vacuum cleaner with a vanity mirror bolted on top – using the client application, and guide it around. So that people know who they're dealing with, the robot's screen displays a live video feed of your face, so they can even pick up on your facial expressions. A camera and microphone are relayed back to your PC so that you can see and hear what's going on around 'you'.

HeadThere sees the Giraffe as being much better than traditional videoconferencing and even suggests what you can do if someone does not return your call. "You could just go over to their office or cube and chat with them, just as if you were there in person. With the Giraffe, you have control. Now you can use a robotic stand-in to talk to people," said the company.

It's not easy to escape from the Giraffe, as its 13kg weight means that it can even push doors open. Your only chance of escape is to use the stairs, as the Giraffe, like the first-generation Daleks, cannot overcome this obstacle – yet.

The Giraffe is due to go on sale in early 2008 and will cost between \$1,800 (around £915) and \$3,000 (around £1,526). HeadThere says there will be substantial discounts for anyone that puts in an early order, and you can register interest on the company's website (www.headthere.com).



◀ The Giraffe: today, videoconferencing. Tomorrow, the world!

Father of Fortran is dead

John Backus, the IBM researcher who developed Fortran and revolutionised computing, has died, aged 82. Fortran, short for Formula Translator, was the first widely used programming language that enabled people to communicate with computers in something resembling English. Before its release in 1957, computers were configured using a tortuous process of hand-coding lines of numbers known as machine code.

Fortran was first released in 1957, when Backus was just 32. It rapidly became popular because its mixture of English commands and algebraic formulae was similar to the vocabulary used by engineers and scientists of the day. It revolutionised computing by making it accessible to a much wider range of people. According to Ken Thompson, who co-created UNIX at Bell Labs in 1969, "95 per cent of the people who programmed in the early years would never have done it without Fortran. It was a massive step."

Fortran was notable for its efficiency. It created programs that ran as quickly as those authored with machine code, something sceptics had considered impossible. Even non-programmers may recognise Fortran statements such as GOTO and DO loops, which have almost become part of popular culture. Fortran is still widely used today, a testament to the language's excellence and flexibility.

Fortran's syntax has not always been appreciated, though. "Consistently separating words by spaces became a general custom around the tenth century AD and lasted until about 1957, when Fortran abandoned the practice," read a somewhat arch reference in the *Sun Fortran Reference Manual*.

Backus was also acclaimed for his part in developing the nearly universally used Backus-Naur form, a syntax to describe grammar for programming languages. He worked with Danish programmer, Peter Naur.

In 1977, Backus was awarded the ACM Turing Award for "profound, influential and lasting contributions to the design of practical high-level programming systems".